

REMARKS/ARGUMENTS

Claims 1-11, 13, and 23-31 are pending in this application. Claim 12 is cancelled. Claims 14-22 are withdrawn. With respect to Claims 1-11, 13, and 23-28, provisional election is made without traverse during a telephone conference with the Examiner on June 18, 2004. Affirmation of the election is respectively submitted. New claims 29-31 have been added to further define Applicant's invention. Support for Claims 29-31 is found on FIG. 1 and page 9, lines 6-29 through page 10, lines 1-15 of Applicant's specification. No new matter has been added.

Drawings

The drawing are objected to as failing to comply with 37 CFR 1.84(p) (5) because FIG. 2 includes a reference characters ('220') not mentioned in the description. The reference character '220' is mentioned in the description by the specification amendment.

The drawings are objected because handwriting in the drawings is difficult to read. The Replacement drawings have been attached to this Response.

Specification

The abstract of the disclosure is objected to because it exceeds 150 words. The abstract of the disclosure is corrected to include less than 150 words by the specification amendment.

Claim Rejections- 35 U.S.C. § 112

Claims 23-28 are rejected under 35 U.S.C. § 112, first paragraph. Applicant respectfully traverses, however Claims 23-28 have been amended. Removal of the pending rejection under 35 U.S.C. § 112 is respectfully requested.

Claim 12 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 is cancelled.

Claim Rejections- 35 U.S.C. § 102

The Patent Office rejected Claims 1-11, 13 and 23-28 under 35 U.S.C. § 102(e) as being anticipated by Iwatani ("Iwatani", U.S. Patent No. 6023780). Applicant respectfully traverses. Applicant respectfully submits that a *prima facie* case of anticipation has not been established for Claims 1-11, 13 and 23-28.

The present invention is directed to a method and system for disk drive data recovery utilizing Cyclic Redundancy Check (CRC) information. The CRC information may be utilized to detect drive anomalies and to verify data path integrity at a byte level on subsequent read operations. The CRC information includes CRC metadata, CRC generated for a data block, or the like. Importantly, in the present invention, CRC metadata is stored in a disk drive separate from its associated data block.

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration. *W.L. Gore & Assocs. v. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

Regarding the rejection of Claims 1 and 23, Applicant respectfully submits that Claims 1 and 23 include elements that have not been disclosed, taught or suggested by Iwatani. For example, Iwatani fails to disclose, teach or suggest "the error detection and correction code metadata is stored in a disk drive separate from the data read from the data disk drive" as recited in Claims 1 and 23.

In the present invention, “error detection and correction code metadata” (CRC metadata) is distinguished from conventional CRC generated while data is read for a data disk drive. Further, the “error detection and correction code metadata” is stored on a disk drive separated from the data disk drive which stores a data block. The above-mentioned element recited in Claims 1 and 23 clearly distinguish “error detection and correction code metadata” (CRC metadata) in the present invention over the CRC or parity data disclosed in Iwatani. Iwatani merely teaches that CRC is added to the host data received from the host computer and the host data with the CRC is divided to generate parity data. In other words, in Iwatani, the CRC becomes part of host data. In contrary, the “error detection and correction code metadata” (CRC metadata) of the present invention is stored separately from other associated data in order to determine drive anomalies. Thus, Applicant respectfully submits that Iwatani fails to teach the above-mentioned elements as recited in Claims 1 and 23.

Accordingly, a *prima facie* case of anticipations of Claims 1 and 23 have not been established. Claims 2-11 and 13 depend on Claim 1. Claims 24-28 depend on Claim 23. Claims 2-11, 13, 24-28 are believed to be allowable based on their dependence upon allowable base claims.

Claim Rejections – 35 U.S.C. § 103

The Patent Office rejected Claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Iwatani. Applicant respectfully traverses.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Ryoka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). See also *In re Wilson*, 165 U.S.P.Q. 494 (C.C.P.A. 1970).

Further, “to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to

modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." (emphasis added) (MPEP § 2143). If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. (emphasis added) *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

As indicated in the foregoing Claim Rejections – 35 USC § 102 section, the primary reference, Iwatani fails to disclose, teach or suggest all the elements recited in Claim 1. Thus, independent Claim 1 is nonobvious under 35 U.S.C. § 103(a). Claim 11 is believed to be allowable based on its dependence upon Claim 1.

CONCLUSION

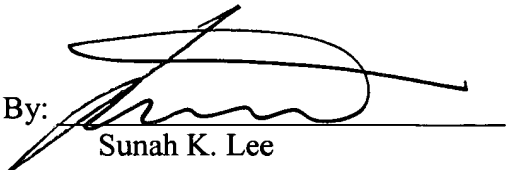
In light of the foregoing remarks, Applicant respectfully requests a timely Notice of Allowance.

Respectfully submitted,

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